Master's in Data Science with Graduate Certificate in GIS

Curriculum Map

For the Data Science Master's degree, the requirements are:

REQUIRED COURSES

Core (4 COURSES):

- DATS 6101 Introduction to Data Science
- DATS 6102 Data Warehousing
- DATS 6103 Introduction to Data Mining
- DATS 6501 Data Science Capstone

Advanced (4 COURSES):

- DATS 6202 Machine Learning I: Algorithm Analysis
- DATS 6203 Machine Learning II: Data Analysis
- DATS 6401 Visualization of Complex Data
- DATS 6402 High Performance Computing and Parallel Computing

APPLICATION AREA ELECTIVE COURSES (2 COURSES):

- DATS 6201 Numerical Linear Algebra and Optimization
- DATS 6499 Data Science Applied Research
- DATS 6450 Topics in Data Science
- GEOG 6304 Geographical Information Systems I
- STAT 6210 Data Analysis
- STAT 6214 Applied Linear Models
- STAT 6242 Modern Regression Analysis

The Geographical Information Systems Graduate Certificate requires completing 4 courses, 2 of which (6 credits) can be used to meet elective requirements for the Data Science M.S. A student pursuing both the degree in data science and certificate in GIS would be able to complete both programs by completing 36 credits.